

Please replace the paragraph from page 31, lines 21-31 with the following:

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Redundancy in the genetic code permits variation in 20P1F12/TMPRSS2 gene sequences. In particular, one skilled in the art will recognize specific codon preferences by a specific host species and can adapt the disclosed sequence as preferred for a desired host. For example, preferred codon sequences typically have rare codons (i.e., codons having a usage frequency of less than about 20% in known sequences of the desired host) replaced with higher frequency codons. Codon preferences for a specific organism may be calculated, for example, by utilizing codon usage tables available on the Internet at the following address: "www.dna.affrc.go.jp/~nakamura/codon.html." Nucleotide sequences that have been optimized for a particular host species by replacing any codons having a usage frequency of less than about 20% are referred to herein as "codon optimized sequences."

In the Claims:

✓ Please amend the claims as follows:

✓ Please cancel claims 4, 8-9, 14, 16, 20-28 and 39-47.

Please replace the presently pending claims with the following claims:

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1. (Twice amended) A method of examining a biological sample for evidence of tumor cell growth comprising comparing the expression level of the 20P1F12/TMPRSS2 gene, which encodes the protein of SEQ. ID. NO: 2 (Figure 1), in the biological sample to the expression of said 20P1F12/TMPRSS2 gene in a corresponding normal sample, wherein enhancement of the level of 20P1F12/TMPRSS2 expression in the biological sample is evidence of tumor cell growth.

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2. (Amended) The method according to claim 1, wherein the level of expression of the 20P1F12/TMPRSS2 gene in the biological sample is evaluated by examining the level of 20P1F12/TMPRSS2 protein produced.

B5 3. (Amended) The method according to claim 2, wherein the level of 20P1F12/TMPRSS2 protein in the biological sample is evaluated by contacting the sample with antibody or fragment thereof immunoreactive with said protein, and observing the presence or absence of an immunocomplex formed from the antibody or fragment with any 20P1F12/TMPRSS2 protein.

5. The method according to claim 1, wherein the biological sample is selected from the group consisting of blood, serum, stool, urine, semen and biopsied tissue.

B6 6. (Twice amended) The method according to claim 1, wherein the tumor cell growth is indicative of a prostate cancer.

7. (Twice amended) The method according to claim 1, wherein the tumor cell growth is indicative of a colon cancer.

10. (Amended) A method of identifying evidence of a neoplasm in a biological sample comprising:

B7 (a) examining a level of expression of 20P1F12/TMPRSS2 gene, which encodes the protein of SEQ. ID. NO: 2 (Figure 1), in a test biological sample; and

(b) comparing the level of said 20P1F12/TMPRSS2 gene expression in the test biological sample to a level of said 20P1F12/TMPRSS2 gene expression found in a comparable normal biological sample,

wherein an enhanced level of said 20P1F12/TMPRSS2 gene products in the test biological sample relative to the normal biological sample is evidence of a neoplasm.

11. The method according to claim 10, wherein the neoplasm is a prostate cancer.

12. The method according to claim 10, wherein the neoplasm is a colon cancer.

13. The method according to claim 10, wherein the test biological sample is selected from the group consisting of blood, serum, stool, urine, semen and biopsied tissue.

B8 15. (Amended) The method according to claim 10, wherein the level of 20P1F12/TMPRSS2 gene expression in the test biological sample is evaluated by examining the level of 20P1F12/TMPRSS2 protein.

B9 17. (Amended) The method of claim 15, wherein the level of 20P1F12/TMPRSS2 protein is evaluated by an immunoassay by contacting the sample with antibody or fragment thereof immunoreactive with said protein and observing the presence or absence of an immunocomplex formed from the antibody or fragment with any 20P1F12/TMPRSS2 protein.

18. (Amended) The method of claim 10, wherein the 20P1F12/TMPRSS2 evaluated in the test biological sample is secreted from neoplastic cells.

19. (Amended) The method of claim 18, wherein the neoplastic cells are prostate cancer cells.

Please add the following new claims:

B10 48. (New) A method of examining a biological sample for evidence of tumor cell growth comprising comparing the expression level of the 20P1F12/TMPRSS2 gene, which encodes the protein encoded by a cDNA clone 20P1F12-GTC1 contained in the plasmid deposited with the American Type Culture Collection (ATCC) as Accession No. 207097, in the biological sample to the expression of said 20P1F12/TMPRSS2 gene in a corresponding normal sample, wherein enhancement of the level of 20P1F12/TMPRSS2 expression in the biological sample is evidence of tumor cell growth.

49. (New) The method according to claim 48, wherein the level of expression of the 20P1F12/TMPRSS2 gene in the biological sample is evaluated by examining the level of 20P1F12/TMPRSS2 protein produced.

50. (New) The method according to claim 49, wherein the level of 20P1F12/TMPRSS2 protein in the biological sample is evaluated by contacting the sample with

antibody or fragment thereof immunoreactive with said protein, and observing the presence or absence of an immunocomplex formed from the antibody or fragment with any 20P1F12/TMPRSS2 protein.

51. (New) The method according to claim 48, wherein the biological sample is selected from the group consisting of blood, serum, stool, urine, semen and biopsied tissue.

52. (New) The method according to claim 48, wherein the tumor cell growth is indicative of a prostate cancer.

53. (New) The method according to claim 48, wherein the tumor cell growth is indicative of a colon cancer.

B10 54. (New) A method of identifying evidence of a neoplasm in a biological sample comprising:

(a) examining a level of expression of 20P1F12/TMPRSS2 gene, which encodes the protein encoded by a cDNA clone 20P1F12-GTC1 contained in the plasmid deposited with the American Type Culture Collection (ATCC) as Accession No. 207097, in a test biological sample; and

(b) comparing the level of said 20P1F12/TMPRSS2 gene expression in the test biological sample to a level of said 20P1F12/TMPRSS2 gene expression found in a comparable normal biological sample,

wherein an enhanced level of said 20P1F12/TMPRSS2 gene products in the test biological sample relative to the normal biological sample is evidence of a neoplasm.

55. (New) The method according to claim 54, wherein the neoplasm is a prostate cancer.

56. (New) The method according to claim 54, wherein the neoplasm is a colon cancer.

57. (New) The method according to claim 54, wherein the test biological sample is selected from the group consisting of blood, serum, stool, urine, semen and biopsied tissue.

58. (New) The method according to claim 54, wherein the level of 20P1F12/TMPRSS2 gene expression in the test biological sample is evaluated by examining the level of 20P1F12/TMPRSS2 protein.

B9 59. (New) The method of claim 58, wherein the level of 20P1F12/TMPRSS2 protein is evaluated by an immunoassay by contacting the sample with antibody or fragment thereof immunoreactive with said protein and observing the presence or absence of an immunocomplex formed from the antibody or fragment with any 20P1F12/TMPRSS2 protein.

60. (New) The method of claim 54, wherein the 20P1F12/TMPRSS2 evaluated in the test biological sample is secreted from neoplastic cells.

61. (New) The method of claim 60, wherein the neoplastic cells are prostate cancer cells..
